REMARKS

By the present Amendment, claims 13 and 14 have been revised to address the Examiner's concern that those claims were directed to non-statutory subject matter. No other amendments have been made.

At the outset it should be noted that filed concurrently with this response is an Information Disclosure Statement (including the appropriate fee). This information was not submitted earlier due to an inadvertent oversight. Applicants regret and apologize for any inconvenience that oversight may cause.

The information relates to oppositions filed in November 2007 against granted European Patent No. 1,675,729B, which corresponds to the subject application. However, no amendments have been made as the result of those oppositions. Nonetheless, consideration of the information is requested.

The claims of the subject application currently stand rejected under 35 U.S.C. § 103 as being obvioius from Cooper et al (EPO 274886), either alone, or in view of Weinstein '080 (U.S. Patent No. 4,912,080) or Weinstein '343 (U.S. Patent No. 4,959,343). Reconsideration of those rejections is requested.

The claimed invention relates to paper for carbonless copy paper sets, and to copy paper sets made up using them. Carbonless copy paper sets typically include a top sheet known as the CB (coated black) sheet, a back sheet known as the CF (coated front) sheet, and, optionally, one or more intermediate sheets known as CFB (coated front and back) sheets. The coatings of the back of the CB sheet, of the front and back of the CFB sheets if any, and of the front of the CF

sheet, contain materials that when brought into association with each other develop a colored image. The sheets are generally bonded together by an edge padding adhesive.

Electrophotographic printers, such as laser printers, use high temperatures to fuse the toner used for printing, and the papers used in these printers need to satisfy a number of challenging criteria, for example good toner adhesion, image quality, dimensional stability and curl. For the HP/Indigo system the paper surface should be compatible with the ink to give ink acceptance and adhesion. It is difficult to provide carbonless copy paper sets which meet all these criteria, and which also have satisfactory edge padding characteristics.

Conventionally, it has been believed that CB sheets should have a low porosity. Thus, for example, U.S. 4,912,080 (Weinstein '080) describes pressure sensitive carbonless transfer sheets made from a base sheet which has a Gurley porosity of 400-4000 seconds. This porosity (which is equivalent to 30.8-3.1 m/min if measured on the alternative Bendtsen scale) is very low.

The applicants have unexpectedly discovered that having a high porosity before CB coating produces acceptable curl in comparison to standard coated grades used for electrophotographic printing. In particular, it has been discovered that the use of a topcoat which gives a sheet having a Bendtsen porosity of greater than 100 ml/min prior to CB conversion provides a sheet which does not curl when used in electrophotographic printers.

Accordingly, the present invention provides a sheet product comprising a paper sheet having on its front a printable coating comprising a pigment and a binder, and on its back isolated droplets of color former solution each confined with a pressure rupturable barrier. The paper sheet carrying said pigment/binder coating has a Bendtsen porosity in excess of 100

ml/min, preferably in excess of 120 ml/min, prior to the application of the droplets of color former solution.

Based on a complete understanding of the present invention, it is submitted that no carbonation of Cooper, Weinstein'080, Weinstein '343 would suggest the claimed invention to one of ordinary skill in the art. Cooper describes pressure-sensitive record materials such as carbonless copy paper sets. These record materials include a paper sheet having on its front a printable pigment coating, and on its back isolated droplets of color former solution (each confined within a pressure rupturable barrier). The pigment coating includes a binder for the pigment together with a synthetic reactive sizing agent, or a coating structure agent, or both.

Cooper differs from the claimed invention at least with respect to the porosity of the paper sheet carrying the pigment/binder coating. The claims call for a "Bendtsen" porosity of at least 100 ml/min. Cooper, however, describes the paper sheet as having Bendtsen porosity of 30 ml/min or more, which is not a disclosure of sufficient specificity to support a conclusion that the claims are unpatentable. Certainly the claims are not anticipated by Cooper. See, e.g., Atofina v. Great Lakes Chemical Corp., 44 F.3d 991, 999, 78 USPQ2d 1417, 1423 (Fed. Cir. 2006). Furthermore, the endpoints of the respective ranges are too remote to conclude that at least "100 ml/min" would be obvious from a teaching of "30 ml/min" or more.

Indeed, at best Cooper teaches a "typical range of 35-50 ml/min", and at most exemplifies a porosity of "55.2" (60.4" after CB coating) - both far below the lower endpoint of "100 ml/min" now claimed. That said, both the contrary teachings of the prior art, and the unexpected advantages of the invention dictate of finding of nonobviousness.

Weinstein '080 and Weinstein '343 teach away from the claimed porosity. While the Examiner has concluded that the Weinstein patents teach advantages associated with a Bendtsen

porosity in excess of 100 ml/min, that conclusion is in error. Inadvertently overlooked is that the Weinstein patents refer to "Gurley porosity scale" - specifically referring to a Gurley porosity of 400-4000 seconds. As set forth in the first full paragraph on page 2 of Applicants' specification, the disclosed "Gurley" porosity corresponds to a range of 30.8 - 3.1 ml/min if measured on the Bendtsen scale[1]. This is clearly a teaching away from the currently claimed feature of "in excess of 100 ml/min". Accordingly, the prior art when considered as a whole, leads away from the claimed invention.

Furthermore, Applicants' unexpected results are evident and adequately demonstrated by the Example. The Example compares a sheet according to the invention having a Bendtsen porosity of 120 mil/min, with a sheet having a Bendtsen porosity of 60 mil/mins (very close to that exemplified in Cooper). The sheet according to the invention provided significantly reduced curl when printed in a Xerox Docutech® digital printing press. This result could not have been predicted from the teachings of the prior art.

For the reasons set forth above, therefore, it is submitted that the rejection of the claims as being obvious is in error and should be withdrawn. Applicants' invention is patentable.

In light of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

[1] The "Gurley" scale and "Bendtsen" scale differ in that on the Gurley scale porosity decreases with increasing value. On the Bendtsen scale, porosity increases with increasing value.

If the Examiner has any questions concerning this response, or the application in general, he is invited to telephone the undersigned at his earliest convenience.

Respectfully submitted,

Bingham McCutchen, LLP

Date: October 10, 2008

By: _____
Bruce J. Boggs, Jr.
Registration No. 32,544

Bingham McCutchen LLP
2020 K Street, NW
Washington , DC 20006
Telephone: 202-373-6000
Facsimile: 202-373-6001